

IN THE SPECIFICATION

Kindly amend paragraph [0011] as follows:

[0011] In accordance with aspects of the present invention, an optical sensor includes an optical source capable of being positioned on a tissue and emitting near infrared light into the tissue at a plurality of selected wavelengths, and a photodetector capable of detecting reflected light from the tissue. The photodetector ~~being~~ is positioned on the tissue removed from the optical source but sufficiently close in proximity to the optical source to contact the same general tissue. A high frequency oscillator is directly coupled to the source. The sensor is coupled to a radio frequency (RF) signal processor that is capable of detecting baseband modulation components from an RF carrier which makes use of the high frequency source oscillator. Examples of RF signal processors are direct conversion receivers, tuned RF receivers, superheterodyne receivers with either synthesized or variable frequency reference oscillators, and the like. The magnitude and phase of the baseband detector furnishes an estimate of the optical path length as well as the absorption. In addition, the source may be wavelength modulated by current control and/or by temperature cooler and a power supply to generate close-proximity optical wavelengths. The wavelength modulation shift in conjunction with additional baseband signal processing provides additional normalization to reduce scattering errors.

KOESTNER BERTANI LLP
18602 MACARTHUR BLVD.
SUITE 400
IRVINE, CA 92612
TEL (949) 251-0230
FAX (949) 251-0260